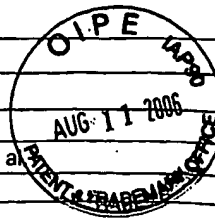


THIRD
INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 1

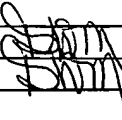
Application Number	10/782,812
Filing Date	February 23, 2004
First Named Inventor	Mohammad Hajaligol et al.
Examiner Name	Dionne W. Mayes
Attorney Docket No.	1021238-000644



U.S. PATENT DOCUMENTS

Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)
[Signature]	7,011,096	B2	Li et al.	03-14-2006
	6,053,176	A	Adams et al.	04-25-2000

FOREIGN PATENT DOCUMENTS

Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	STATUS							
					Translation	Partial Translation	Eng. Lang. Summary	Search Report	IPER	Abstract	Cited in Spec	
	1315374		Great Britain	05-02-1973								X
	6-105675		Japan	04-19-1994								

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

Examiner Signature	[Signature]	Date Considered	10-27-06
--------------------	-------------	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

Substitute for form 1449A/PTO	ATTORNEY'S DKT NO. 021238-644	APPLICATION NO. 10/782,812
	APPLICANT Mohammad HAJALIGOL et al.	
	FILING DATE February 23, 2004	GROUP Unassigned
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT	

2003/0005940	A1	Dyakonov et al.	01-01-2003			
FOREIGN PATENT DOCUMENTS						
Examiner Initials	Foreign Patent Document		Country	Date of Publication (MM-DD-YYYY)	Translation	
	Number	Kind Code (if known)			Yes	no
SJM	WO87/06104		WIPO	10-22-1987		
	WO 00/40104		WIPO	07-13-2000		
	562,786		United Kingdom	07-17-1944		
	685,822		United Kingdom	01-14-1953		
	863,287		United Kingdom	03-22-1961		
	908,773		United Kingdom	10-24-1962		
	914,355		United Kingdom	01-02-1963		
	973,854		United Kingdom	10-28-1964		
	1,104,993		United Kingdom	03-06-1968		
	1,113,979		United Kingdom	06-15-1968		
	1,315,287		United Kingdom	05-02-1973		
	3600462A1		Germany	07-16-1987		X
	3640953A1		Germany	06-09-1988		X
	609217		Switzerland	02-28-1979		X
	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
SJM	SAKAI et al., Thermal Decarbonylation of Catechol, Hydroquinone and Resorcinol, Chemistry Letters, 1978, pp. 1153-1156, Chemical Society of Japan,					
	NILSSON et al., Direct Probing of the Adsorbate-Substrate Chemical bond Using angle-Dependent X-Ray-Emission Spectroscopy, Physical Review B, April 15, 1995, pp. 10 244- 10-247, Vol 51, No. 15, The American Physical Society, USA					
	SCHLOTZHAUER et al., Pyrolytic Evaluation of Low Chlorogenic Acid Tobacco in the Formation of the Tobacco Smoke CO-Carcinogen Catechol, Journal of Analytical & Applied Pyrolysis, 1992, pp. 231-238, Vol. 22, Elsevier Science, Netherlands					
	SCHLOTZHAUER et al., Pyrolytic Studies on the Origin of Phenolic Compounds in Tobacco Smoke, Tobacco Science, 1981, pp. 6-10, Vol 25, Tobacco Science, USA					
	FENG et al., Agglomeration and Phase Transition of a Nanophase Iron Oxide Catalyst, Journal of Catalysis, 1993, pp. 510-519, Vol 143, Academic Press, Inc., San Diego, CA					
	SCHLOTZHAUER et al., Pyrolytic Studies on the Contribution of Tobacco Leaf Constituents to the Formation of Smoke Catechols, Journal Agric. Food Chem., 1982, pp. 372-374, Vol 30, Amer. Chem. Society, Washington, DC					
	CARMELLA et al., Roles of Tobacco Cellulose, Sugars, and Chlorogenic Acid as Precursors to Catechol in Cigarette Smoke, Jour. Agric. Food Chem., 1984, pp. 267-273, Vol. 32, Amer Chem Society, Wash. DC					
	SHARMA et al., Effect of Reaction Conditions on Pyrolysis of Chlorogenic Acid, Jour. of Analytical and Applied Pyrolysis, 2002, pp. 281-298, Vol 62, Elsevier, England					
	SAKUMA et al., Pyrolysis of Chlorogenic Acid and Rutin, Agric. Biol. Chem., 1982, pp. 1311-1317, Vol. 46, Nippon Nogai Kagakukai, Agricultural Chemical Society of Japan					
	ZHAO et al., Structure of a Nanophase Iron Oxide Catalyst, Journal of Catalysis, 1993, pp. 499-509, Vol. 143, Academic Press, Inc. USA					
	ELLG et al., Pyrolysis of Volatile Aromatic Hydrocarbons and n-Heptane over Calcium Oxide and Quartz, Ind. Eng Chem. Process Des. Dev., 1985, pp. 1080-1087, Vol 24, American Chemical Society, Washington, DC					
	SMITH et al., The Relative Toxicity of Substituted Phenols Reported in Cigarette Mainstream Smoke, Toxicological Sciences, 2002, pp. 265-278, Vol 69, Society of Toxicology, Oxford Univ Press					
	HOPKINSON et al., Nonlinear Island Growth Dynamics in Adsorbate-Induced Restructuring of Quasihexagonal Reconstructed					

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

(05/01)

Replacement

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

 ATTORNEY'S DKT NO.
021238-644

 APPLICATION NO.
10/782,812

 APPLICANT
Mohammed HAJALIGOL et al.

 FILING DATE
February 23, 2004

 GROUP
Unassigned

NON PATENT LITERATURE DOCUMENTS

 Examiner
Initials

Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

- Pt (100) by CO., Physical Review Letters, Sept 8, 1993, pp.1597-1600, Vol. 71, No 10, American Physical Society, USA
 YEO et al., Calorimetric Measurement of the Energy Difference Between Two solid Surface Phases, Science, June 23, 1995, pp.1731-1732, Vol. 268,
 GRUYTERS et al., Modelling Temporal Kinetic Oscillations for CO Oxidation on Pt (100). The (1x1)-CO Island Growth Rate Power Law Model, Chemical Physics Letters, January 6, 1995, pp.1-6, Vol 232, Elsevier Science, Oxford, England
 CANT et al., Silver and Gold Catalyzed Reactions of Carbon Monoxide with Nitric Oxide and with Oxygen, Journal of Catalysis, 1975, pp. 531-539, Vol. 37, Academic Press, Inc., USA
 XIA et al., Efficient Stable Catalysts for Low Temperature Carbon Monoxide Oxidation, Journal of Catalysis, 1999, pp. 91-105, Vol. 185, Academic Press, Inc., USA
 HARUTA et al., Gold Catalysts Prepared by Coprecipitation for Low-Temperature Oxidation of Hydrogen and of Carbon Monoxide, Journal of Catalysis, 1989, pp. 301-309, Vol. 115, Academic Press, Inc., USA
 RANDALL et al., Reduction of Nitrogen Oxides by Carbon Monoxide Over an Iron Oxide Catalyst Under Dynamic Conditions, Applied Catalysis B: Environmental, 1998, pp. 357-369, Vol. 17, Elsevier Science, England
 LANZILLOTTI et al., One-Dimensional Gas Concentration Profiles Within a Burning Cigarette During a Puff, Beitrage zur Tabakforschung, 1975, pp.219-224, Vol. Band 8, Heft 4,
 U et al., The Removal of Carbon Monoxide by Iron Oxide Nanoparticles, Applied Catalysis B: Environmental, 2002, pp. 1-12, Vol. 1326, Elsevier Science, England
 BAKER, The Formation of the Oxides of Carbon by the Pyrolysis of Tobacco, Beitrage zur Tabakforschung, 1975, pp. 16-27, Vol. Band 8, Heft 1
 SHEN et al., Cu Containg Octahedral Molecular Sieves and Octahedral Layered Materials, Journal of Catalysis, 1998, pp.115-122, Vol. 161, Article No. 168, Academic Press, Inc. USA
 BRAGE et al., Tar Evolution Profiles Obtained from Gasification of Biomass and Coal, Biomass & Bioenergy, 2000, pp. 87-91, Vol. 18, Elsevier, England
 BRAGE et al., Characteristics of Evolution of Tar from Wood Pyrolysis in a Fixed-Bed Reactor, FUEL, 1996, pp. 213-219, Vol. 75 No. 2, Elsevier Sci Ltd., England
 RATH et al., Tar Cracking from Fast Pyrolysis of Large Beech Wood Particles, Journal of Analytical & Applied Pyrolysis, 2002, pp. 83-92, Vol 62, Elsevier, England
 HASLER et al., Sampling and Analysis of Particles and Tars from Biomass Gasifiers, Biomass & Bioenergy, 2000, pp. 61-68, Vol 18, Elsevier, England
 WORNAT et al., Polycyclic Aromatic Hydrocarbons from the Pyrolysis of Catechol (ortho-dihydroxybenzene), a Model Fuel Representative of Entities in Tobacco, Coal & Lignin, FUEL, 2001, pp. 1711-1728, Vol. 80, Elsevier, England
 WINDIG, Chemical Interpretation of Differences in Pyrolysis-Mass Spectra of Simulated Mixtures of Biopolymers by Factor Analysis with Graphical Rotation, Journal of Analytical & Applied Pyrolysis, 1981/1982, pp. 199-212, Vol. 3 Elsevier Scientific Pub Co., Netherlands
 WALKER et al., Carbon Monoxide & Propene Oxidation by Iron Oxides for Auto-Emission Control, Journal of Catalysis, 1988, pp. 298-209, Vol. 110, Academic Press, Inc., USA
 COLUSSI et al., The Very Low-Pressure Pyrolysis of Phenyl Ethyl Ether, Phenyl Allyl Ether, & Benzyl Methyl Ether & the Enthalpy of Formation of the Phenoxy Radical, International Journal of Chemical Kinetics, 1977, pp. 161-178, Vol. IX, John Wiley & Sons, Inc., USA
 WINDIG et al., Interactive Self-Modeling Multivariate Analysis, Chemometrics & Intelligent Laboratory Systems, 1990, pp. 7-30, Vol. 9, Elsevier Sci Pub. B.V., Amsterdam, Netherlands
 LOVELL et al., The Gas Phase Pyrolysis of Phenol, Intl Journal of Chemical Kinetics, 1989, pp. 547-560, Vol. 21, John Wiley & Sons, Inc. USA
 RATH et al., Cracking Reactions of Tar from Pyrolysis of Spruce Wood, FUEL, 2001, pp. 1379-1389, Vol. 80, Elsevier Science Ltd., Elsevier
 WONG et al., In-Situ Study of MCM-41-Supported Iron Oxide Catalysts by XANES & EXAFS, Applied Catalysis A: General, 2000, pp. 115-126, Vol. 198, Elsevier Science B.V.
 HARUTA et al., Synergism in the Catalysis of Supported Gold, New Aspects of Spillover Effect in Catalysis, 1993, pp. 45-52, Elsevier Science Publishers B.V.
 FOHLISCH et al., The Bonding of CO to Metal Surfaces, Journal of Chemical Physics, 2000, pp. 1846-1858, Vol 112, No. 4, American Institute of Physics, USA
 HAUERT et al., CO Adsorption on Glassy Ni₄₀Zr₆₀ and Polycrystalline Ni₅Zr, Rapidly Quenched Metals, 1985, pp.1493-1498,

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

(05/01)

Replacement

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

ATTORNEY'S DKT NO.
021238-644

APPLICATION NO.
10/782,812

APPLICANT
Mohammad HAJALIGOL et al.

FILING DATE
February 23, 2004

GROUP
Unassigned

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Include name of author (In CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
<i>[Handwritten initials]</i>	2003, LI et al., The Removal of Carbon Monoxide by Iron Oxide Nanoparticles, Applied Catalysis B: Environmental, 2003, pp. 151 - 162, Vol. 43, Elsevier Science B.V.
<i>[Handwritten initials]</i>	HOPKINSON et al., Surface Restructuring Dynamics in CO Adsorption, Desorption, and reaction with NO on Pt(100), Chemical Physics, 1993, pp. 433 - 452, Vol. 177, Elsevier Science Publishers B.V., North-Holland
<i>[Handwritten initials]</i>	SCHLOGL et al., Oxidation of Carbon Monoxide over Palladium on Zirconia Prepared from Amorphous Pd-Zr alloy, Journal of Catalysis, 1992, pp. 139-157, Vol. 137, Academic Press, Inc.
<i>[Handwritten initials]</i>	BOND, Catalysis by Gold, Catalysis. Review- Science Eng., 1999, pp. 319 - 388, Vol 41 (3&4), Marcel Dekker, Inc.
<i>[Handwritten initials]</i>	KNACKE et al., Thermochemical Properties of Inorganic Substances, 1991, Vol. 1 & 2, 2 nd Edition, Springer-Verlag, Berlin
<i>[Handwritten initials]</i>	MISER et al., High-Resolution TEM Characterization of Iron Oxide Catalyst and Reaction Products, ACS Symposium. Catl 19
<i>[Handwritten initials]</i>	EVANS et al., Chemistry of Tar Formation and Maturation in the Thermochemical Conversion of Biomass, Fuel & Energy Abstracts May 1998, pp. 197, Vol 39, Alternative Energy Sources
<i>[Handwritten initials]</i>	Notification of Transmittal of the International Search Report or the Declaration for PCT/US03/03456 dated June 4, 2003.
<i>[Handwritten initials]</i>	Table of Physical Constant of Inorganic Compounds: Ferric Oxide, obtained from CRC Handbook of Chemistry and Physics (3 Electronic Edition), retrieved from http://www.knovel.com/knovel2/SearchResults.jsp on 6/13/03.

Dianna W. Mayes

10-30-06

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 808; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

(03/01)

Replacement